

Application No. 10/645,817  
Docket No. 2002U015.US  
Reply to Office Action Dated 09/28/2004

### Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### Listing of Claims:

1. (Currently amended) A method of forming a supported ~~activator~~ catalyst composition comprising combining (a) a halogenated aromatic aluminum activator compound with (b) a fluorinated support and a one or more catalysts to form a supported activated catalyst composition; wherein the fluorinated support possesses from 0.001 mmol OH/g ~~inorganic-oxide~~ support to 1 mmol OH/g ~~inorganic-oxide~~ support.
2. (Original) The method of Claim 1, further comprising the step of removing the reaction products resulting from the combination of (a) and (b).
3. (Cancelled).
4. (Currently amended) The method of Claim ~~3~~ 1, wherein the one or more catalyst compounds are selected from the group consisting of metallocenes and Group 15-containing catalyst compounds.
5. (Original) The method of claim 1, wherein the halogenated aromatic aluminum activator compound comprises at least two fluorine atoms.
6. (Original) The method of claim 1, wherein the halogenated activator compound comprises a tetrafluoro compound or a trifluoro compound.

Application No. 10/645,817  
Docket No. 2002U015.US  
Reply to Office Action Dated 09/28/2004

7. (Original) The method of claim 1, wherein the halogenated aromatic aluminum activator compound has the formula  $R_nAl(ArHal)_{3-n}$ , wherein ArHal is a halogenated aryl group, R is a monoanionic ligand, and n is 1 or 2.
8. (Original) The method of claim 3, wherein the supported activated catalyst composition comprises no more than 0.001 mmol OH/g silica.
9. (Currently amended) The method of claim 3, wherein the supported activated catalyst includes aluminum in an amount of from 2 wt% to 0.35 wt% by weight of supported activated catalyst.
10. (Original) The method of claim 1, wherein the fluorinated support comprises from less than about 0.1 mmol OH/g silica after combination with the halogenated aromatic aluminum activator.
11. (Original) The method of claim 1, wherein the fluorinated support is first formed by combining a fluorinating agent with the inorganic oxide at a temperature of from less than 700°C.
12. (Currently amended) The method of claim 1, wherein the catalyst comprises a metallocene-type compound.
13. (Original) The method of claim 1, wherein the fluorinated support comprises an inorganic support selected from the group consisting of talc, clay, silica, alumina, magnesia, zirconia, iron oxides, boria, calcium oxide, zinc oxide, barium oxide, thorium, aluminum phosphate gel, hydroxylated polyvinylchloride and hydroxylated polystyrene.
14. (Original) The method of claim 2, wherein the catalyst compound is combined with the halogenated aromatic aluminum activator compound prior to being combined with the fluorinated support.

Application No. 10/645,817

Docket No. 2002U015.US

Reply to Office Action Dated 09/28/2004

15. (Original) The method of claim 2, wherein the catalyst is combined with the fluorinated support at the same time as the halogenated aromatic aluminum activator compound.

16. (Original) The method of Claim 1, wherein the halogenated aromatic aluminum activator compound is combined with the fluorinated support in an amount of from 1OH:1Al to 1OH:5Al (molar ratio).

17-33 (Cancelled)

34. (New) The method of Claim 1, wherein the method consists essentially of combining (a) a halogenated aromatic aluminum activator compound with (b) a fluorinated support and one or more catalysts to form a supported activated catalyst composition.